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**Software Test Plan
for the Project-X1 xx1 System**

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1 OVERVIEW

This Software Test Plan (STP) describes the test environment and identifies each planned test for the Project-X1 xx1 System. The target of this test plan will be the Release 3 version of the xx1 flight software (FSW). The primary goal of this testing will be to evaluate the performance of the xx1 application under off-nominal conditions and exercise testing of predicates which have not been a focus of Formal Qualification Test (FQT) activities.

The xx1 system is comprised of the following elements: xx1, xx2, and xx3. The majority of the devices comprising this system are located on the S/C1. This application is responsible for control of the following devices: xx1, xx2 and xx3.

The testing described in this document will be performed using the xx1 environment developed by Developer X for testing flight software.

This document is organized as follows:

Section 1: Overview - Provides an overview of this document.

Section 2: Referenced Documents - Identifies all documents applicable to the compilation of this STP.

Section 3: Test Environment - Identifies the resources necessary to perform the software testing.

Section 4: Test Identification - Identifies and describes each software test.

Section 5: Notes - Contains general information to aid the reader of this document.

2 REFERENCED DOCUMENTS

This section lists the documents, which are referenced or applicable to this STP:

Document	Document Title	Revision
XX1.x1	Project-X1 xx1 Software Requirements Specification	-
-	-	-

3 TEST ENVIRONMENT

This test plan will utilize the xx1 environment developed by Developer X.

3.1 SOFTWARE ITEMS

The following software items are required to accomplish associated tasks during software testing.

- a. *xx1 Flight Software* – The xx1 Release 3 versions of the flight software will be required for this test plan.
- b. *Other Utilities & Software* – Description goes here
- c. *Others* - ..

3.2 HARDWARE/FIRMWARE ITEMS

The following hardware and/or firmware items are required to accomplish associated tasks during software testing.

- a. *HW* – Description/requirements goes here.
- b. *Others* - ..

3.3 DATA ANALYSIS REQUIREMENTS

The following system capabilities will be utilized for capturing and analyzing any unexpected errors, etc., that may occur during the test procedures.

4 TEST IDENTIFICATION

This section identifies the general details and special requirements for each software test.

4.1 IVV-xx1-0001

a. General Test Objective

The Purpose of this test is to determine whether the xx1 system will maintain the commanded state while xx1.21 is unavailable.

b. Special Requirements

None.

4.2 IVV-xx1-0002

a. General Test Objective

This test case consists of running a sequence of commands to monitor any undocumented interactions between xx1.12 and xx1.21 while ...

b. Special Requirements

None.

4.3 IVV-xx1-0003

a. General Test Objective

b. Special Requirements

5 NOTES

5.1 ACRONYMS AND ABBREVIATIONS

CSCI	Computer Software Configuration Item
FSW	Flight Software
GN&C	Guidance, Navigation, and Control
ICD	Interface Control Document
IV&V	Independent Verification and Validation
SRS	Software Requirements Specification
STD	Software Test Description
STP	Software Test Plan

6 APPENDIX A: TEST CASE DESCRIPTION

6.1 IVV-xx1-0001

Test Case 1:

- a. Case Description
The case description goes here
- b. Hardware/Software Initialization steps
Required initialization and configuration steps
- c. Data Requirements
For any system configuration
- d. Assumptions and Constraints
If any
- e. Case Inputs
Input files
- f. Output Data to be Collected
Output files
- g. Success Criteria
When certain functions were invoked or responses received, etc.

6.2 IVV-xx1-0002

Test Case 1:

- a. Case Description
The case description goes here
 - b. Hardware/Software Initialization steps
Required initialization and configuration steps
 - c. Data Requirements
For any system configuration
 - d. Assumptions and Constraints
None
 - e. Case Inputs
-

Input files

- f. Output Data to be Collected
Output files
- g. Success Criteria
No unexpected state/commands detected.

6.3 IVV-xx1-0003

Test Case 1:

Test Case 2:
